



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,284	12/12/2003	Jean Cotteret	LORE:005US	9941

7590 09/23/2005

Mark B. Wilson
Fulbright & Jaworski L.L.P.
Suite 2400
600 Congress Avenue
Austin, TX 78701

EXAMINER

ELHILO, EISA B

ART UNIT	PAPER NUMBER
----------	--------------

1751

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,284

Applicant(s)

COTTERET ET AL.

Examiner

Eisa B. Elhilo

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11 and 22-45 is/are rejected.
- 7) ☒ Claim(s) 9 and 12-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/24/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1751

Claims 1-45 are pending in this application.

DETAILED ACTION

Claim Objections

1. Claim 43 objected to because of the following informalities:

The limitation “preferably hydrogen peroxide” should be deleted to make the claim in a proper Markush language. Appropriate correction is required.

2. The examiner makes of record that instant claims 32, 35 and 40 recite a broad percentage range followed by a narrow percentage range. For examination purposes, the examiner asserts that the narrow percentage ranges recited in the instant claims 32, 35 and 40 are merely exemplary ranges, and thus, the prior art will be applied against the broadest percentage ranges recited in the instant claims 32, 35 and 40. Further, the examiner suggests that applicant should delete the narrow ranges from the instant claims 32, 35 and 40 and add new dependent claims that recite the narrow ranges recited in the instant claims 32, 35 and 40.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10-11, 22-27 and 30-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. (US 6,461,391 B1).

Lim et al. (US' 391 B1) teaches a hair dyeing composition comprising an oxidation base 4-amino-2-fluro-phenol (see col. 4, line 28), which is similar to para-aminophenol compounds of the claimed formula (V), when in the claimed formula (V), $p = 0$, $R'2$ and $R'5$ are hydrogen atoms and $R'1$ is a chlorine atom, and cationic tertiary para-phenylenediamine having a formula (1), which similar to the claimed formula (I), when in the reference formula (1), R , $R1$ and $R2$ are alkyl radicals, $R4$ is hydrogen atom or an alkyl radical and $R5$ is a hydrogen atom as claimed in claims 1-8 and 10-11 (see col. 2, formula (1) and lines 44-50) and when in the claimed formula (I), $R2$ represents the onion radical Z of the claimed formula (II), $R3$ is a hydrogen atom, n is 1 or 0 and $R1$ is an alkyl radical. Lim et al. also, teaches the compounds 1-(4-aminophenyl)- N,N -dimethyl- N -pentylpyrrolidin-3-ammonium iodide and 1-(4-aminophenyl)- N -(2-hydroxyethyl)- N,N -dimethylpyrrolidin-3-ammonium iodide which are similar to the claimed compounds as claimed in claims 22-26 (see col. 19, Example 22 (compound 7) and col. 26, Example 29 (compound 14) The cationic tertiary para-phenylenediamine is represented in the amount of 0.01 to about 5.0%, which is within the claimed range as claimed in claim 32 (see col. 3, lines 43-46), wherein the composition also comprises couplers such as resorcinol (1,3-dihydroxy benzene) as claimed in claims 33-34 (see col. 4, lines 55-56), wherein the couplers that include resorcinol and oxidation bases that include para-aminophenol are used in equivalent amounts of 0.001 to 10% which overlapped with claimed range as claimed in claims 30-31 and within the claimed range as claimed in claims 35 and 40 (see col. 7, lines 10-15), wherein the composition further comprises cationic polymers as claimed in claim 36 (see col. 9, line 19), thickening polymers as claimed in claim 37 (see col. 8, lines 39-55), surfactants as claimed in claim 38 (see col.8, lines 23-25), additional primary intermediate (oxidation bases) of benzene-

Art Unit: 1751

1,4-diamine (para-phenylenediamine) as claimed in claim 39 (see col. 3, line 57), wherein the composition comprises direct dyes as claimed in claim 41 (see col. 7, lines 18-54), wherein the composition further comprises hydroxylated solvent such as ethanol as claimed in claim 42 (see col. 8, line 15) and oxidizing agent of hydrogen peroxide as claimed in claim 43 (see 9, line 66). Lim et al. (US' 391 B1) also teaches a method for dyeing hair as claimed in claim 44 (see col. 9, lines 60-64).

The instant claims differ from the reference by reciting the claimed formula (V) in which R⁵ denotes a chlorine atom.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a composition by replacing the fluorine atom as taught by Lim et al. with a chlorine atom to make such a composition. Such a modification would be obvious because the reference teaches and suggests the use of the compound 4-amino-2-flouro-phenol in a dyeing composition (see col. 4, line 28), which is analogous to the compound 4-amino-2-chloro-phenol of the claimed formula (V), in that they are both halogens, and, thus, a person of the ordinary skill in the art would have been motivated to replace a fluorine atom with a chlorine atom with the reasonable expectation of obtaining the desired dyeing composition and would have expected that analogous compounds should have similar properties, absent unexpected results.

With respect to claim 45, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a composition by using a multi compartment device for holding and maintaining the composition because the reference clearly teaches that the oxidation composition is mixed with the oxidizing agent at the time of use which

Art Unit: 1751

implies that both the oxidation composition and the oxidizing agent are provided in separate containers, and, thus, a person of the ordinary skill in the art would be motivated to use a multi-compartment devices for holding the dyeing composition, absent unexpected results.

4 Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. (US 6,461,391 B1) in view of Rose (DE 199 51 008 A1).

The disclosure of Lim et al. (US' 391 B1) as described above, does not teach or disclose the claimed species 4-amino-6-((5'-amino-2'-hydroxy-3'-methylphenyl)methyl)-2-methylphenol and bis(5-amino-2-hydroxyphenyl)methane as claimed.

However, Lim et al. (US' 391 B1) suggests the use of the genus para-aminophenols in the dyeing composition (see col. 4, lines 19-28).

Rose (DE' 008 A1) in analogous art of hair dyeing formulation, teaches a composition comprising the claimed species 4-amino-6-((5'-amino-2'-hydroxy-3'-methylphenyl)methyl)-2-methylphenol and bis(5-amino-2-hydroxyphenyl)methane as claimed in claims 28-29 (see page 3, lines 28-29 and lines 56-57).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made, would be motivated to modify the composition of Lim et al. (US' 391 B1) by incorporating the species 4-amino-6-((5'-amino-2'-hydroxy-3'-methylphenyl)methyl)-2-methylphenol and bis(5-amino-2-hydroxyphenyl)methane to make such a composition because Lim et al. (US' 391 B1) as a primary reference suggests the use of para-aminophenols as a genus in the dyeing composition. Rose (DE' 008 A1) as a secondary reference clearly teaches para-aminophenol claimed species, and, thus, a person of the ordinary skill in the art would be motivated to incorporate the species 4-amino-6-((5'-amino-2'-hydroxy-3'-

Art Unit: 1751

methylphenyl)methyl)-2-methylphenol and bis(5-amino-2-hydroxyphenyl)methane as taught by Rose (DE' 008) in the dyeing composition of Lim et al. (US' 391 B1), and, would expect such a composition to have similar properties to those claimed, absent unexpected results.

Allowable Subject Matter

5 Claims 9 and 12-21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose cationic para-phenylenedimanie compounds of the claimed formula (II), in which x is equal 1. The prior art of record also do not teach or disclose para-phenylenedimanie compounds of the claimed formulae (III) and (IV). The prior art of record further do not teach or disclose the claimed formula

Conclusion

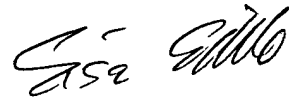
6 The references listed on from 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo
Primary Examiner
Art Unit 1751

September 14, 2005